

K6YQTPAARA NEWSLETTER
VOLUME 53 NUMBER 6, June 2004**W6OTX**

PAARAgraphs

Celebrating 67 years as an *active* ham radio club—*Since 1937*
Newsletter for the Palo Alto Amateur Radio Association, Inc.



CALENDAR

June.....4	PAARA Meeting, 7:30 Menlo Park Recreation Center 700 Alma Street, Menlo Park
June.....9	PAARA Board Meeting, 7:30 Red Cross Bld., 400 Mitchell Ln., Palo Alto
July.....9	PAARA Meeting, 7:30
July.....14	PAARA Board Meeting, 7:30
Aug.....6	PAARA Meeting, 7:30
Aug.....11	PAARA Board Meeting, 7:30

PROGRAM

June 4, 2004 7:30 P.

Speaker:
Wayne Burdick, N6KR

Program:

“Design for Portability:
The Elecraft KX1 Transceiver”

Join us for pre-meeting eyeball
at Su Hong Restaurant, 1039 El Camino Real, Menlo Park
Food will be served at 6:00 sharp, so guests will be on time for the PAARA
meeting. Those arriving late will be responsible for their own order and bill.

—PAARA Radio NET every Monday evening at 8:30 P.M., local time—
on the 145.230 -600 MHz repeater, PL tone off

FIELD DAY EXERCISE. JUNE 25 - 27.

PAARA members are reminded to set aside the weekend of Friday, June 25 through Sunday, June 27 for club activities. We need as many PAARA members, other hams or just some of the regular or ordinary folks to assist in this massive demonstration of our abilities to maintain a 24 hour emergency communications control site. Please come and help set up or tear down the numerous towers, antennas or other club equipment. Do not hesitate to bring some type of donated supplies such as beverages; food, snacks; fuel for the generators; etc. Any little thing will be appreciated.

Also, if you have not worked a real HF station, this is your window of opportunity, as PAARA will have a GOTA station set up and running. GOTA is the Get On The Air radio station that will allow just about anyone to conduct an actual on the air communication. What fun!

~Terry Finn. AF6TF.

No only child has ever been elected president of the United States.

June 4th 7:30 p.m. PAARA speaker:
Wayne Burdick, N6KR

Program: Design for Portability:
The Elecraft KX1 Transceiver

Wayne Burdick, N6KR, will discuss the Elecraft KX1 ultra-portable, 3-band HF QRP transceiver. He'll cover the evolution of portable HF stations, as well as the design methodology Elecraft used in creating the KX1. The presentation will examine several high points in portable QRP transceiver history, from Heathkit's HW series to W7ZOI's Micromountaineer, each of which informed the design of the KX1. Minimal-setup HF wire antennas and other accessories will also be detailed, completing a look at Elecraft's systems approach to station integration.

For more information on Elecraft products go to:

<http://www.elecraft.com>

~Jim Rice, K6AK

Miscellaneous

ELECTRONIC FLEA MARKET @ Foothill College

Sponsorship by A.S.V.A.R.O.

[Association of Silicon Valley Amateur Radio Organizations]

Second Saturday of month, March-October, 6 AM-2PM

Howard M. Krawetz, N6HM 650-856-9761

Hosts:

June 12 Santa Clara County Amateur Radio Association.

July 10 Southern Peninsula Emergency Communications System.

Aug. 14 Foothills Amateur Radio Society.

Sep. 11 Silicon Valley Emergency Communications System.

Oct. 9 West Valley Amateur Radio Association.

PAARA Palo Alto Amateur Radio Association

meets 1st Friday 7:30 each month, Net 145.230 each Monday 8:30,
 contact: Andreas Junge N6NU.....(650) 233 0843

FARS Foothills Amateur Radio Society

meets 4th Friday 7:30 each month,
 contact: <http://www.fars.k6ya.org>.

NCDXC Northern California DX Club

meets 2nd Friday 7:30 each month,
 repeater for member info 147.360, Thur 8:00PM,
 contact: Mike Gavin W6WZ, (650) 851 8699.

NorCalQRP Northern California QRP Club

meets 1st Sunday each month,
 contact: Jim Cates 3241 Eastwood Rd., Sacramento, CA 95821.

SPECS Southern Peninsula Emergency Communication System

meets each Monday 8:00PM on Net 145.27, 440.80 MHz, www.specsnet.org
 contact: Tom Cascone, KF6LWZ, 650-688-0441 specs@svpal.org

SCARES South County Amateur Radio Emergency Service

meets 3rd Thursday 7:30 each month, San Carlos City Hall.
 Net is on 146.445 [PL 114.8] & 444.50 (PL-100) 7:30 Monday evenings.
 contact:

SCCRA Santa Clara County Amateur Radio Association

Operates W6UU & W6UU/R, repeater 146.985-pl
 Nets: 2m, 7:30 Mon; 70cm, 442.425+ (pl 107.2) Thur.
 Web site www.qsl.net/sccra
 meets 2nd Mon each month @ 7:30 PM.
 contact: Clark Murphy KE6KXO 408-262-9334
 ARRL/VEC license testing contact 408-507-4698

SVECS Silicon Valley Emergency Communications

Operates AA6BT repeater (146.115 MHz+)
 contact: Lou Stierer WA6QYS 408 241 7999

WVARA West Valley Amateur Radio Association

operates W6PIY repeater 147.39+, 223.96, 441.875, 1286.2
 WVARA now has a 6M repeater, linked to 440 and 1.2gHz
 meets 3rd Wed every month.
 contact: Bill Ashby N6FFC, 408-267-3118 or
 N6FFC@Juno.com or N6FFC@ARRL.NET

Perham Foundation (discontinued)

Disaster Services,

PALO ALTO CHAPTER, American Red Cross, www.paarc.org

400 Mitchell Lane
 Meets 3rd Wed. each month 7:30PM.
 HF, packet, BBS, ATV, OSCAR Gateway, NASA satellite.
 contact: Mac Millian 650-688-0423. MACM@paarc.org

SAN JOSE CHAPTER, American Red Cross

contact: Scott Hensley KB6UOO, (408) 967 7924, FSHENSLEY@NOVELL.COM

VE Exams, 3rd Saturday each month, 10:30AM, 145.23- PL=100Hz

Redwood City Main Library, Community Conference Room
 1044 Middlefield Road, Redwood City, CA
 contact: Al WB6IMX@att.net.

Swap meet, LosPositas College, Livermore, 1st Sunday each month.

Contact: Cliff Kibbe (209) 835 6715 or Eliot Ross (925) 606 7710

(please send changes to PAARAgaphs editor: k6uro@arrl.net)

Palo Alto Amateur Radio Association, Inc. PO Box 911

Menlo Park, CA 94026

PresidentAndreas Junge N6NU.....650-233 0843
n6nu@arrl.net
 Vice President.....Jim Rice, K6AK.....650-851-2274
k6ak@arrl.net
 SecretaryTerry Finn, AF6TF.....650-366-9111
terry@incognitoservices.com
 TreasurerRon Chester, W6AZ408-243 2221
ron@taxhelp.com
 Membership.....Vic Black, AB6SO.....650-366 0636
ab6so@smrn.com
 Membership.....Lisa Rice, KG6KQS.....650-851-2274
lisarice@earthlink.net
 W6OTX & K6YQT Station Trustee.Gerry Tucker, N6NV..650- 326 4908
 Property.....Gerry Tucker, N6NV.....650-326 4908
 Badges.....Dave Rogers, K5DKR650-361-1555
dkr55@bigfoot.com
 Sign Maker.....Steve Brune, KG6OUB.....650-740-4367
 Raffle.....Jim Rice, K6AK.....650-851-2274
 Ticket Master.....Kyle Rice, KG6MSK
 Ticket Master assistant, Jan Brune, K6IAN.
 Advertising.....Terry Finn, AF6TF.....650-366-9111
 Field Day Coordinator....Gerry Tucker, N6NV.....650-326 4908
 FD Logistics Coordinator .Steve Brune, KG6OUB.....650-740-4367
stevebrune@sbcglobal.net
 ASVARO representative Howard Takaoka, KG6GRO 650-856-9761
htakaoka@excite.com
 WebmasterPeter Sheerin, K6WEB.....
K6WEB@arrl.net

Board of Directors

Gerry Tucker, N6NV.....650-326 4908....'05
gerry_tucker@juno.com
 Rolf Klibo, N6NEI650-856-2748'05
klibo@earthlink.net
 Adrianus Schrauwen, W6AJS...650-494-6256 ...'04
hagenees@att.net
 Bob Korte, KD6KYT.....650-595 1842 ..'05
rgk4u@aol.com

..see "Calendar" for Board meeting times, visitors welcome-

PAARAgaphs Staff

Editor.....Wally Porter, K6URO.....650-494 7038
k6uro@arrl.net
 Database.....Lisa Rice, KG6KQS.....650-851-2274
lisarice@earthlink.net
 Columns.....Vic Black, AB6SO.....650-366 0636
ab6so@smrn.com
Terry Finn, AF6TF.....650-366-9111
terry@incognitoservices.com
 Photography, Steve Brune KG6OUB
 additional pictures by
 Dick Kors, KM6EP, John Larribeau KR6MR, Wally Porter K6URO

PAARAgaphs e-mail address: k6uro@arrl.net

Submit material for PAARAgaphs by the 15th

Use WORD, MS Publisher, rich text, or ascii

(New Times Roman is the common font)

send **pictures as attachments** .jpg

PAARA Website: www.paara.org

PAARA Forum: <http://www.paara.org/forum/>

LIFE MEMBERSHIP

Awarded by Action of the PAARA Board

Ron Panton, W6VG Leslie Vickery, W6AKR

Joe Gomes, KB6HDC



PAARA HONORS

JOE GOMES, KB6HDC

by Terry Finn AF6TF

Joseph Manuel Gomes was born in Portola Valley on July 24, 1920. That makes him an 83 year young local boy who has become a really well known PAARA member and is the latest recipient of the coveted and prestigious **PAARA Life Member award**.

Joe acknowledges that he is the oldest living resident of Portola Valley who was actually born there and lived most of his life there. He was actually born in the family home which was a six room residence located on the estate of Dr. Fitzhugh, where Joe's father was employed. Joe was the only child of Manuel Gomes and Rose Gomes who had immigrated from the Azores at the turn of the century. His father Manuel was a gardener with a green thumb who had been hired by Dr. Fitzhugh to create a six acre orchard on his property. The Doctor had purchased the land from the Miramonte Estate which at that time was slowly being sub-divided into residential properties. Joe can remember that the orchard was originally planted in prunes, but since they did not do well on a second planting, the orchard became an apple growing area.

Joe attended grammar school in Portola Valley, then attended Sequoia High School in Redwood City where they were transported by bus from the distant Portola Valley area. He graduated from Sequoia High School in 1938 and immediately went to work for Woolworth's in Redwood City as a stockclerk. He later took a job at Schlage Lock works in South San Francisco where he learned drafting in the methods department. Joe would commute on the train from Redwood City. During this time he earned his real estate sales persons license and was making attempts to sell property to older adults in the community. He recalls that it was rather difficult to separate money from the fifty year olds, when he was just a kid himself. However, he did well enough to be able to purchase his first new car to commute from the homestead into Redwood City. It was a 1941 Chevrolet and came in handy as he had developed a new interest in life.

Eugena "Mary" May Graham was born and raised in San Francisco and was working as a telephone operator for the phone company when she attracted the attention of Joe. Although he was busy making a living, Joe took the time to marry Mary on Jan 11, 1943. They are still married today and were able to raise two healthy daughters. Jo Ann was born in 1945 and Melinda was born in 1947.

While working at Schlage Lock, Joe became friends with **Leonard Drossel, WD6CDQ (SK)** who exposed him to amateur radio and the morse code. He could be considered his elmer. However, in 1943 Joe was drafted into the U.S. Army and was sent to Camp Roberts, about 40 miles south of King City, California. He took training at the infantry school although much of his training was in engine maintenance and engine electronics or electrical wiring, rather than rifle or infantry exercises, as he was so mechanically inclined. Joe remembers one of his instructors always saying, "hookup the voltmeter in parallel and the ammeter in series". Joe actually became an electrical wiring instructor there before he was transferred to his next assignment at Fort Benning in Georgia.

Joe became a member of the 71st Infantry Division and was almost assigned as a rifleman in an attack squad. However, due to his mechanical ability they trained him to be a cannon pointer responsible for manually aiming or sighting the cannon onto the target. He was shipped out to New York in January 1945 and boarded the U.S.S. Explorer, which was a civilian troop carrier that sailed for France. They disembarked in La Havre several months after D Day and started with the 7th Army crossing through the French countryside. Joe recalls that the Army camps were named after major cigarette brands and he was living in the "Lucky Strike" company camp. They ultimately moved across to the Maginow Line and joined the 3rd Army as they broke through the German lines and traveled into Austria. They stopped fighting on May 8, 1945. Joe recalls that his particular company was very lucky as they did not lose a single soldier, although one private shot himself in the hand

as he was playing with a German Luger pistol he had taken from a fallen German soldier.

He came back to California and was discharged honorably in February 1946 in Sacramento.

Joe took a job as an auto mechanic in San Carlos at 700 El Camino Real for about one year. He had moved into the old family home with his wife and daughters at this time. He then took a job at the Redwood City Kaiser (automobile) dealership at 1600 El Camino Real. For awhile, Joe worked at the International Harvester dealer in Redwood City and then he went to work for the Oldsmobile dealer in Palo Alto known as Paddleford Olds. He stayed there for 17 years as the senior automobile mechanic.

Joe can vividly recall a bizarre kidnapping case that happened in the seventies where in he was able to provide the San Mateo Sheriff's Office with some rather important information that was used successfully to solve the crime and apprehend the three culprits. This case is commonly referred to as the Chowchilla school bus kidnapping where the bus load of school children were buried in a rock quarry in the Livermore area. Had it not been for the observant and questioning mind of Joe, this case may have taken a different tragic turn.

Joe bought out the lease on the Union 76 service station in Portola Valley in November 1963. He was actually in the dealer training class when President Kennedy was assassinated and was taking stock at his new service station on the day they buried President Kennedy. Joe ran that station successfully for 17 years and finally retired in 1980. Since then, Joe has been volunteering his time in various jobs for the Town of Portola Valley and can vividly remember having to make all of the decisions during the 1989 earthquake.

Joe earned his novice license in 1986 and was issued his current call sign of **KB6HDC**. He claims that he was finally able to take the time to study and learn the code when he retired, so it didn't take long to upgrade his license class to General at the amateur radio testing that was made available at the ham flea market. Joe joined PAARA during the eighties and became very active in PAARA activities. He has been responsible for keeping the generators and other mechanical things running for field day and other events. He was always willing to assist at the flea markets and picnics. Joe also had the room to store various large pieces of equipment on his property in Portola Valley. He actually built his own Heathkit transceiver and still operates an Icom IC-02AT, although the battery is shot and he really needs a new BP3 to continue operating.

Joe really enjoys visiting with other hams, especially members of PAARA who frequently go by his temporary quarters at a facility in Redwood City. He has nothing but good things to say about PAARA members **Jon Zweig, W6FEL; Andreas Junge, N6NU; Andy Korsak, KR6DD; Stan Towle, WA6ZGI; Terry Finn, AF6TF, Bob Korte, KD6KYT** and a host of others who have visited him regularly. Joe has not been able to attend PAARA meetings for some time due to his health problems, however he insists that he is capable of going if someone could give him a ride to and from the Menlo Park site.

PAARA recognizes **Joe Gomes, KB6HDC**, as an active member and thanks him for his years of participation and assistance with amateur radio events.

~Terry Finn. AF6TF.

FOR SALE.

1932 Ford truck. Model BB, 1 & 1/2 ton, dual rear wheels, frame off restoration almost complete. 4 cylinder re-built engine. All powder coating finished. It is a driver !! California historical license plates, clean title. The perfect advertising platform for your business or a possible mobile rig for field day or those special weekend trips.

It is stored on a vehicle trailer next to the PAARA field day trailer in Redwood City. When you come down to do a little work on the PAARA equipment on Saturday mornings, take a look at it. A photo can be seen at www.terryfinn.com or contact **Terry, AF6TF** at 650-366-9111.

FIELD DAY SITE DIRECTIONS.

The Field Day site will be at the same location as last year, at the highest point on the hill within the Bayfront Park. The Park entrance is located at the east end of Marsh Road, about one block east of Highway 101. Some of the old timers will remember this as the Marsh Road dumps, since it was a huge dump area before the City of Menlo Park took it over and made a rather nice public park out of the area.

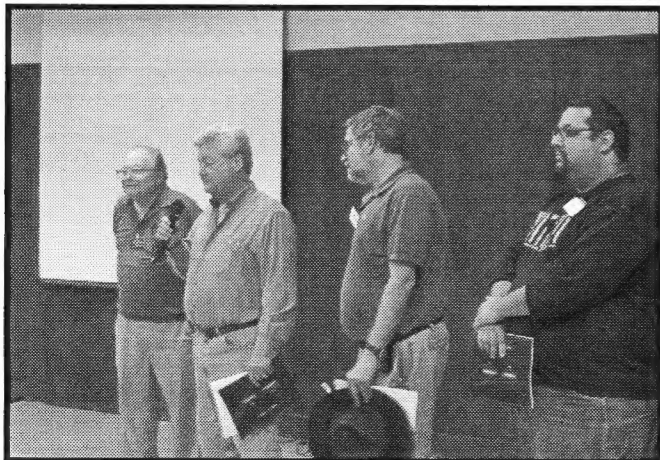
The Park is officially open from 8 AM until Sunset. However, through a special arrangement, PAARA members will have emergency access to the Park throughout the Field Day exercise. Prior arrangements to enter or leave the Park after regular business hours must be made with the Field Day coordinator, Gerry Tucker, N6NV.

PAARA members will be able to easily locate the actual exercise site by following the posted signs that will be erected on Friday morning. Simply follow the PAARA signs through the various gates and around the corners. The set up and tower raising will occur on Friday afternoon, while the tear down and pack up will happen on Sunday after 12 noon. We must be out of the area and have left nothing behind by 6 PM.

The PAARA volunteers who will be assisting with the trailer, tower and antenna equipment preparations, shall meet at the trailer storage area on Friday morning. The large trailer is located in the rear RV parking lot at the Harbor Village, 3015 East Bayshore Road, Redwood City.

If you have not yet been given an assignment by the Field Day coordinator, Gerry Tucker, N6NV, please contact him immediately. If you are simply going to show up to operate a station, take a photo or see what it is all about, then please bring along some extra beverages, donuts, food, etc., to share. Remember, the more participation by PAARA members, the better. We are involved in this contest to earn points because we want to win again. See you all there.

~Terry Finn. AF6TF.



Join us for pre-meeting eyeball

QSO

June 4th

gab & gobble

Food will be served at 6:00 sharp, so guests will be on time for the PAARA meeting. Those arriving late will be responsible for their own food order.

6 pm— at Su Hong Restaurant
1039 El Camino Real
Menlo Park

—across from Kepler's Book Store—

AMATEUR RADIO License testing

This session is produced by Bay Area Educational Amateur Radio Society - member W5YI VEC

Study Session, Followed by Exam

Offering a one day study session for
 Technician or General theory,
 followed by testing.

Morse Code tests will not be given.

WHEN: Saturday, July 31, 2004 8:00am - 5pm

WHERE: College of San Mateo

FEE: \$25.00

Register: wb6zbu@arrl.net

Questions:

Ross Peterson 650-349-5349 or wb6zbu@arrl.net

Class size is limited, reservations are required.

Prospective Hams should have an active Ham as a sponsor to assist in familiarization with amateur operation.

RESERVE YOUR SPACE t BE A HAM !

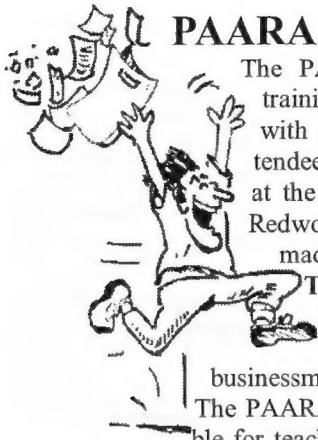
Sponsored by:

College of San Mateo Electronics Technology Department

[\(http://gocsm.net/\)](http://gocsm.net/)

South County Amateur Radio Emergency Services

[\(http://www.k6mpn.org/\)](http://www.k6mpn.org/)



PAARA CODE CLASS.

The PAARA sponsored Morse code training class has been completed with good results for most of the attendees. The class started on April 6th at the Sequoia Club on Broadway in Redwood City. These facilities were made available by PAARA member **Terry Finn, AF6TF**, who is on the Board of Directors of this well known private club for businessmen.

The PAARA members who were responsible for teaching and administering the class every Tuesday and Thursday evening were **Stan Towle, WA6ZGI**, **Mike Gavin, W6WZ**, and **Terry Finn, AF6TF**. These PAARA members should be recognized for giving up so much of their own personal time and experience to assist others in qualifying for the up-graded amateur licenses they earned. This is what ham radio is all about, isn't it?

There were fifteen students enrolled in the class and they each paid twenty dollars to PAARA for this unique study method. One of the enticements provided to the students was that they would receive a ten dollar rebate if they successfully passed the test at the end of the class. The primary method of code teaching was the use of the Gordon West code training tapes. This worked well in the large card playing room next to the bar and lounge located upstairs in the Sequoia Club building.

The students were advised that the instructors would not be providing anything on a silver platter as it was the personal responsibility of each person to practice on their own at least twice a day during the week. As you know, some people simply find it easier to learn in a group atmosphere, rather than by themselves.

Arrangements were made with **Gordon Girton, W6NW**, the VEC (coordinator) of the Sunnyvale VEC testing services to allow for a special testing time on May 6th at the class location. The authorized VE (examiners) appointed to this task were **Dan Curry, K6DLC**; **Mike Gavin, W6WZ**; **Stan Towle, WA6ZGI** and **Terry Finn, AF6TF**.

PAARA member **Wayne Johnson, W6WOH**, was so well versed in the code that he actually took the test earlier at the regular VE testing session in Redwood City and passed the exam with ease. He has subsequently up-graded to General Class by taking that exam on May 8th at the regular Sunnyvale VE testing session. However, we are going to include

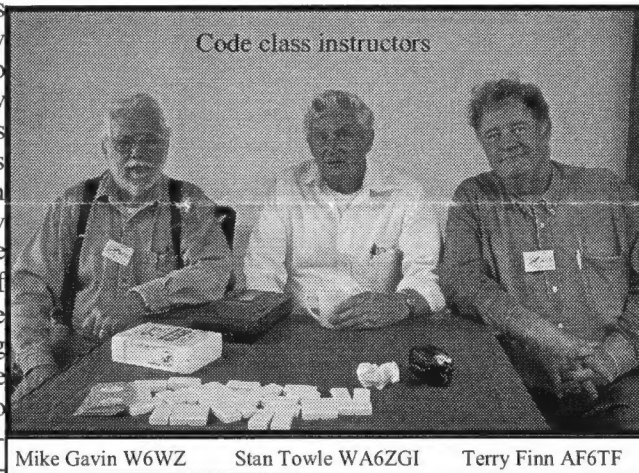
Wayne as a graduate of the PAARA code class activities.

There were seven students who attended the special code testing session on May 6th. Several of them did not quite make it and were 'voted off of the island'. As a result, the code class has been extended to include two more sessions on May 11th & 13th so those students will be able to attend the regular VE testing session in Redwood City on May 15th. It is believed that they will all pass on that date and the results will be reported in this fine publication.

PAARA member **Mark Cohen, KR1PTO**, passed the code test and subsequently up-graded to a General class license at the regular Sunnyvale VE testing session on May 8th.

PAARA member **Mike Fisher, KG6QXO**, passed the code test and was immediately up-graded to General class since he held a passing certificate from the exam he took almost one year ago this month.

PAARA member **David Ungar, KG6RWP**, passed the code test and was immediately up-graded to Extra class since he held a passing certificate from the earlier exams he had taken.



Mike Gavin W6WZ Stan Towle WA6ZGI Terry Finn AF6TF

Both **Fisher, KG6QXO** and **Ungar, KG6RWP** were listed on the FCC web site as having earned their new licenses the next day, May 7th. Congratulations to all of you.

All of these new licensees were recognized at the PAARA meeting of May 7th and on a suggestion from **Mike Fisher, KG6QXO**, they returned their ten dollar rebates back into PAARA so it can be used for other exciting PAARA activities planned for the future. What a group this is !!!

The PAARA Board of Directors will consider another morse code training class in the future, possibly next winter. The next PAARA training class that is being considered at this time is an operations class that would involve several PAARA members radio shacks or mobile stations. The training curriculum is being developed over the next several months by the training committee established by PAARA President **Andreas Junge, N6NU**.

Is this a great radio club or what ?

~Terry Finn. AF6TF.

ANOTHER PAARA MEMBER PASSES THE CODE TEST !!!

Congratulations are extended to **Dave Rogers, K5DKR** for successfully passing the FCC code test after graduation from the PAARA sponsored code training class. He is now studying for his up grade exam to earn the coveted General Class license.

~Terry Finn. AF6TF.



Technical Tip

DX in a Topsy-Turvy World

by Vic Black AB6SO

DX to a DX hound is like garlic to a garlic lover. You can have too little, you can have almost enough, but you can never have too much. Recently, we've been suffering DX withdrawal symptoms. A couple of years ago, chasing DX was a casual daytime affair centered on the higher bands above 10 MHz. Now most activity is limited to night hours on bands below 10 MHz. It's becoming difficult to work "new ones" from Northern California because of lackluster solar activity. The solar flux index is a number that describes the sun's power output at radio frequencies. This equates to the ionizing power sent to earth's ionosphere. The prime DX bands, 10 through 20 meters, are becoming dormant as the solar flux has remained below 100 for most of 2004.

Good propagation on 10 meters depends on solar radiation to ionize the ionosphere's E and F layers in order to raise the maximum usable frequency (MUF) above 28MHz. This occurs when the solar flux index reaches 150 or more and during daylight only. The higher the solar flux, the higher the MUF. Since 10 meters is a daytime band, your signals will be heard any place on earth where the sun is shining. We can often work Europe and Africa during the morning as signals head east. The middle of the day is prime for Central and South America. Signals head west to Asia and Oceania during late afternoon. Generally, 10 meters is lifeless at local nightfall, even with a high solar flux.

Fifteen meters is similar to ten meters. It, too, is a daytime band, but long range communications are often possible for an hour or so after sundown. As the ionosphere is no longer ionized at local sunset, free electrons recombine with their host atoms, the MUF starts to drop and the ionosphere is less refractive. Since 15 meters (21MHz) is quite a way below 10 meters (28MHz), the MUF does not lower to 21MHz until after sundown. Then signals stop bouncing off the F-layer and begin bouncing off the lower E- layer. As darkness approaches, this changes where signals return to earth. With a very high solar flux, the ionosphere is more highly ionized so the E- layer stays reflective longer, the MUF drops more slowly, and 15 meters shuts down later.

Twenty meters is the lowest of the "high bands" and can be open to some part of the world 24 hours per day during the 11-year solar cycle maximum. During the solar minimum, however, even 20 meters often shuts down at night and sometimes during the day.

The D-layer is the lowest layer ionized by sunlight. During daylight hours the D-layer absorbs part of your signal on the way to the E and F layers and again on the return to earth. D-layer absorption increases as you go lower in frequency, especially below 10 MHz, so there is virtually no daytime 40 meter skip. At sunset, D-layer absorption diminishes and 40 meters comes alive.

Recently more activity has shown up on 80 and 160 meters, just above the AM broadcast band. Some see this as a propagation improvement for the lower bands as the solar cycle minimum approaches. This is probably not the case. With little or no high band propagation, stations are simply moving lower in frequency where propagation is not affected by the E and F layers. Most DX will be worked at night rather than during daylight hours for the next two or three years.

Some rules of thumb: High HF bands tend to be daytime bands. Lower frequencies tend to be night time bands. Solar flux affects the maximum usable frequency. High flux equates to high MUF. Solar flares generally do not cause noisy conditions below 10 MHz. Geomagnetic storms affect low frequencies more than high ones.

In your search for rare ones, stay up late at night or wake up early with the roosters. Some parts of the world overlap night hours with Northern California for only a few minutes each day. Both 80 and 160 meters are noisier than the high bands. Midwestern summer thunder storms cause "static crashes", which make weak signal copy more difficult. During summer, propagation is predominantly north-south. There is little more than water south of Northern California and very little activity north of here. Phone bands will become overcrowded so your best bet will be CW or data modes. A challenge for many of us is getting enough wire into the air for low band antennas. Don't be discouraged, though. If this is your first venture into HF during a solar downturn, accept the challenges as new frontiers to explore and tame.

~Vic Black AB6SO

RACES

Greetings, everyone!

The annual "Field Day" emergency communications exercise (and contest!) is coming up: June 26 & 27. If you are a Stanford person, contact me directly to sign up or learn more. If you are with PAARA, see: <http://www.paara.org/FieldDay/>

Finally, don't forget to check into our local radio nets:

1. SPECS net: Mondays at 8 p.m. on 145.270 (-) PL 100 [www.specsnet.org] (Stanford folks can just check into the W6YX net beforehand <http://www-w6yx.stanford.edu>; folks in San Mateo County can check in when they call for "Palo Alto and North" check-ins)

2. SCARES net: Mondays at 7:30 p.m. on 146.445 Simplex or 444.500 (-) PL 100.0. [www.k6mpn.org] (If you are not a SCARES member, check in during the "guest check-in" portion of the net.)

3. The San Mateo County Sheriff's Office of Emergency Services (OES) holds a net every Tuesday at 8:00 p.m. on 146.865 (-) PL 114.8

tnx es 73,

Ken Dueker KB6BPM

Emergency Coordinator Amateur Radio Emergency Service/RACES: Atherton, Menlo Park & Stanford



Technical Tip

Why Contest?

by Vic Black AB6SO

Called tests, early contests were designed to validate our ability to operate under less than ideal conditions in preparation for emergencies. Some, such as Field Day, still do that. Required on-air exchanges simulate emergency messages. While some operators hate contests and others love them, contests do have redeeming value. Contests enable you to check your station's coverage area. They are a good way to earn awards such as Worked All States, DXCC, VUCC, etc. Operators who may not ordinarily talk to you will call during contests. All contacts count for points. Contests attract a lot of operators on a regular basis as a display of how much activity there is on our bands. This helps save the bands from overzealous legislators who are tempted to sell spectrum to the highest bidders. Mainly contests are a lot of fun. A major benefit of contesting is the ability to quickly hone your skills. An example was the now-defunct Novice Roundup. It ran for about 10 days and encouraged Novice CW operators to get on the air each afternoon after school. At the end of 10 days of operation, many Novices were ready for the upgrade test to General Class at a time when the code requirement was 13 WPM. Some contests are mode or theme based (SSB, CW, RTTY, PSK, EME, etc.). Many are frequency based, such as HF, VHF/UHF, and Microwave or are one band affairs (160 meters, 10 meters, or 6 meters). Others are power based, such as QRP, or are team or mobile events. State QSO parties activate rare counties to encourage county and state hunting. Don't worry that your station isn't competitive. You compete against everyone for contacts, but only in your own entry class for points. There's something for everyone. For information on upcoming contests, go to <http://www.hornuco pia.com/contestcal/contestcal.html>. Links lead to individual contest rules. Live your Amateur Radio dreams. With determination and an open mind, anything is possible. And remember, if you're not having fun, you're not doing it right.

PAARA BADGES

to order one, pay membership coordinator

Lisa Rice KG6KQS

lisarice@earthlink.net

next meeting pick up from

Dave Rogers, K5DKR

dkr55@bigfoot.com

or contact at next PAARA meeting

ITU STANDARD PHONETIC ALPHABET

A - ALFA.	(AL-fah)
B - BRAVO.	(BRAH-voh)
C - CHARLIE.	(CHAR-lee)
D - DELTA.	(DELL-tah)
E - ECHO.	(ECK-oh)
F - FOXTROT.	(FOKS-trot)
G - GOLF.	(GOLF)
H - HOTEL.	(hoh-TELL)
I - INDIA.	(IN-dee-ah)
J - JULIET.	(JEW-lee-ETT)
K - KILO.	(KEY-loh)
L - LIMA.	(LEE-mah)
M - MIKE.	(MIKE)
N - NOVEMBER.	(NO-vem-BER)
O - OSCAR.	(OSS-cah)
P - PAPA.	(pah-PAH)
Q - QUEBEC.	(keh-BECK)
R - ROMEO.	(ROW-me-oh)
S - SIERRA.	(see-AIR-rah)
T - TANGO.	(TANG-GO)
U - UNIFORM.	(YOU-nee-form)
V - VICTOR.	(VIK-tah)
W - WHISKEY.	(WISS-key)
X - XRAY	(ECKS-ray)
Y - YANKEE.	(YANG-key)
Z - ZULU.	(ZOO-loo)

The International Telecommunication Union (ITU) and the North Atlantic Treaty Organization (NATO) both adopted the phonetic alphabet in 1956 for radio communications purposes. Since then it has been accepted as the World standard by the Federal Aviation Administration (FAA), the International Civil Aviation Organization (ICAO), the Federal Communications Commission (FCC), the U.S. Military and the American Radio Relay League (ARRL).

Some of the material noted above was provided by K6KSR, J.D.Harper, who has an article published on page 63 of the May issue of QST.

Newly licensed amateur radio operators are requested to memorize these phonetics and use them accordingly when operating. Senior PAARA members have noticed that some hams are using other words to identify their call signs, especially when using the repeaters. Well folks, quite frankly, it is time to get with the program and not continue sounding like a bunch of CB'ers. Communications is what we do best, therefore, we should be doing it the right way, especially if we are PAARA members.

~Terry Finn. AF6TF.



GOOD OLD STUFF from PAARAGRAPHS History

*Andy Korsak, KR6DD
kr6dd@arrl.net

30 years ago June 1974 VOL. XVIII No.6

(see May '04 issue for editor, club policies, etc.) Cover design: B. Rapp (no call sign stated — anyone recall who that was?)

PAARA officers: Pres. Fred Canham K6YT (SK), V.P.: Mike Eccles G3PPE/W6, Sect'y: Hal Moore W6DEF, Treas.: Paul Churchill W6QBY, Trustee of W6OTX:

Vance Wardlow W6FLE (The Board of directors included yours truly, VE3FZK/W6 at the time)

[Editor's (WA6NCX) renewed plea]: MAKE IT in the Bigtime! Send your editor something and save him from the perils of Boredom!

OUR NEXT MEETING is on Friday, June 7, 1974. It will commence at 7:30PM sharp...PROGRAM: ED HILTON, W6VKP, of Hewlett Packard, will speak on **Integrated Circuits** and how they are made... with some notes on ham-type IC's...

Coffee -- donuts -- cookies -- eyeball QSO's -- raffle [*things haven't changed, have they!*]

HEY YOUSE GUYS -- WE HAVE A GREAT FIELD DAY PLANNED!!!! Field Day is on June 22-23 and we have the same site we had last year -- the Hill behind Valparaiso Drive off La Loma Drive in Menlo Park. [**that area is now filled with posh luxury homes!**]

WANTED: Plate Transformer 110 and 220 volt primary. Secondary to obtain 3000 to 3500 volts DC ... Irv Wolfe, W6HHN [**gosh, whoever builds high power stuff anymore?**]

SOME MEMBER NEWS At our May meeting Milt W6NFN and Jerry W6NIR got to blabbing and discovered they were in the same class at the University of Santa Clara 36 years ago!

FCC CLOSES DOWN AN UNLICENSED STATION....The following is true..."Operation Poppa" an elite group of [MDARC] radio club members were able to track down a pirate radio station. ... a radio station on 3690 kHz playing music...pinning the meter in Concord... Sunday March 10th...transmitter hunt...Carl K5OWC/6, Jim WA6PXU, WB6YBE, Art VE2AQV/W6 --- some DF equipment supplied by Ted W6PFW --- pirate station located [within 45 minutes] --- Ney Landry, the FCC District Field Engineer for this region, was consulted and "updated" by club members --- FCC completed the job by shutting down the station.

CIRCUIT DIAGRAMS: FM adaptation for AM 2m transmitters

(20 years ago -- missing issue in my collection)

10 years ago June 1994 Volume 39

PAARA Club Meeting June 3... **Wayne Burdick N6KR**, developer of the newly introduced **SIERRA**, an all band QRP rig for the NorCal QRP Club .. Vick Black, AB6SO, who led us to N6KR and his activities. ...dinner 6:00PM at Su Hong ...talk-in at 145.23(-)PL100 and 147.45/simplex

WELCOME NEW MEMBERS ...Bill Smith KE6CHQ...Larry Carr KE6AGJ...Herman "Kit" Kohlmoos Jr W6ISO [*hey guys, now you know when you joined up*]

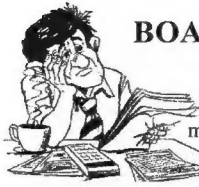
THE LIGHTER SIDE from VE7JLB, *Scara-Gram* WARNING The Surgeon General advises that YOU SHOULD NOT WALK THROUGH SCREEN DOORS; you might strain yourself.

THE FLOPPY "J" ANTENNA ...Reprinted from "Printed Circuit" Vol.II No.4 The South West Iowa Amateur Radio Club ...

Materials: 6' of TV Twin Lead, 1 female BNC chassis mount... [looks very much like the currently popular "fold up J" antennas] ... We have suspended this antenna from a chandelier, dangled it from a ceiling fan, tacked it to a pole...even glued it to a cinder block wall...its performance is excellent.

Photos by N6PGM taken at the PAARA May picnic at the QTH of Helga and Ron W6VG

(Does "Good Old Stuff" look interesting? If you would like more, contact **Andy*** and offer to Scan, Copy, Edit, etc. It is too much for one person. ~ed.)



BOARD OF DIRECTORS MEETING.

May 12, 2004

The PAARA Board of Directors held their monthly meeting at the Red Cross offices in Palo Alto on Wednesday, May 12, 2004. Vice President **Jim Rice, K6AK**, brought the meeting to order at 2000 hours as the President, **Andreas Junge, N6NU** was unable to attend due to educational commitments.

In attendance was Secretary, **Terry Finn, AF6TF**; Treasurer **Ron Chester, W6AZ**; PAARAgaphs editor, **Wally Porter, K6URO**; Membership Committee co-chairman, **Vic Black, AB6SO**; Board Member, **Gerry Tucker, N6NV**; name badge coordinator, **Dave Rogers, K5DKR**; AS-VARO representative, **Howard Takaoka, KG6GRO**; Board member, **Rolf Klippo, N6NFI**; Board member, **Bob Korte, KD6KYT**; member, **Stan Towle, WA6ZGI**; member, **Mike Gavin, W6WZ**; and member, **David Cooper, KE6PFF**.

Jim Rice, K6AK provided a detailed report on the discussions and negotiations he has had with the City of Menlo Park Recreation Dept. regarding the use of their large meeting room. After a lengthy and aggressive presentation by Jim Rice, the Recreation Dept. people finally agreed on a fair room rental price that was guaranteed for at least the next year. As a result, PAARA will continue to use the Menlo Park facilities for the monthly radio club meetings.

Vic Black presented PAARA with a bag of goodies that can be used at club meetings for hand outs or prizes for deserving members. The packages contain small electronic components that may be used for experiments or radio projects. They will be used as surprise gifts.

Terry Finn, with the assistance of **Stan Towle** and **Mike Gavin** gave an up date regarding the code training class that they had just presented over the last six weeks. There were five graduates who passed the FCC code test and a number of others who will be continuing their own practice at home in an attempt to pass the test later in the year. The training CD provided by PAARA member **Al Montoya, WB6IMX** was returned and the contract cancelled regarding the distribution of the CD.

The Board agreed to present longtime PAARA member **Joe Gomez** with the Life Member award for his outstanding assistance provided to the club.

Gerry Tucker led a lengthy discussion of the PAARA Field Day activities plans for the event in June. He has already assigned members to various duties and requests that other PAARA members volunteer some of their time and expertise for this annual exercise. There will be further information provided at the regular June meeting and at the Saturday morning trailer preparation area. **Terry Finn** made the arrangements for the special insurance coverage required by the City of Menlo Park for this event. **Gerry Tucker** has met personally with the appropriate authorities and almost all the arrangements have been confirmed for the use of the City area known as Bay Front Park.

The meeting was adjourned at 2110 hours. Many of the attendees then traveled over to the regular pizza place on the El Camino Real in Menlo Park for further discussions about Field Day, some pizza and beverages.

~Terry Finn. AF6TF., PAARA Secretary

FIELD DAY PREPARATIONS.

PAARA members are reminded that every Saturday morning (except for the flea market day of June 12) from 9 AM till noon, volunteers are requested to assist in preparing the trailers and equipment for the annual Field Day exercise.

We meet at the storage area where the towers, antennas and large trailer are currently located at the rear RV parking lot at Harbor Village, 3015 East Bayshore Road in Redwood City. Most of the heavy work has been completed by a small core of regular PAARA volunteers. However, we still require assistance with painting, welding, cleaning, signs and low voltage wiring.

The actual moving of this equipment will occur on Friday, June 25th in the morning. The equipment will be moved back into this storage area during the afternoon of Sunday, June 27th.

See you all there.

~Terry Finn. AF6TF.

Drafts of the Declaration of Independence were written on hemp paper

GEORGE PARKS, W6AOF, SK

BETTY BARNACLE, Mercury News (edited wp)

As the son of a Stanford University chemistry professor, George Sutton Parks Jr., as a child, had the run of the campus, where he loved to play in the underground web of steam tunnels that then heated the academic buildings. As a young adult and a 1958 Stanford graduate in electrical engineering, he left the tunnels behind him, concentrating instead on space.

Mr. Parks, a Palo Alto native and fourth-generation Californian, died of cancer April 5. He was 70. A Navy veteran who served in the Korean conflict, he also was a leading Cold War scientist. His radio communications career took him from the Stanford Research Institute to GTE Sylva, Ford Aerospace, Globe Wireless and, for the U.S. Department of Defense, around the world from Australia to Russia. But Santa Clara County residents probably are most familiar with an early project that Mr. Parks worked on for SRI, a 150-foot antenna dish for radar and space communications. Built behind Stanford in the foothills where he used to ride his bike as a youngster, "the dish," as it is known, tilted its huge ear initially to catch the echoes of signals it and other similar antennas bounced off various planets to determine their distances from Earth as one of the steps toward space travel. During his SRI career, from 1959 to '78, Mr. Parks worked on radar measurements of missile exhaust plumes to determine if the method could be used in long-range detection. He also analyzed the effects of high-altitude nuclear detonations on electronic systems. He later worked on protecting the nation's missile and communications systems as well as large facilities such as NORAD headquarters in Colorado. A senior research engineer by 1969, Parks determined the weaknesses of foreign systems and led a project to examine disturbances caused by underground nuclear tests by other nations. Much of Mr. Parks' work was classified, but his second wife, Barbara, said he was able to talk freely with her because she also was involved with classified work at SRI, where the two met. "He was humorous and very easygoing," his wife of 39 years said. "We loved to backpack and hike in the beautiful Sierra." He also unwound from the stress of work by piloting small planes and operating a ham radio. "I had such fun as a child going into the hills around Stanford with my father to fly kites," his daughter, Janet Swanson, said. The steam tunnel adventurer still had a key to get himself and his kids into the locked area.

George Sutton Parks Jr., W6AOF

Born: Aug. 2, 1933, in Palo Alto

Died: April 5, 2004, in Santa Clara

Survived by: His wife, Barbara Bunker Parks of Sunnyvale; his children, Janet Parks Swanson of Sunnyvale, Steven Parks of Dallas and Nancy Parks of London; and five grandsons.

DONATION REQUESTED.

Sister Jean, KG6UGO, who lives at the Mother House of the Dominican Sisters of Mission San Jose is seeking a donation. She would very much like to have a working 2 meter base station with a power supply and appropriate antenna (not a hand-held unit). This equipment would be used for the emergency communications system that they are slowly putting together at the Mission.

If you or someone you know is in a position to assist with this, please contact PAARA member **Stan Towle, WA6ZGI** at 650-363-0890 as he is coordinating the design and installation of their radio room.

~Terry Finn. AF6TF.

Congratulations:

PAARA Raffle Prize Winners / May 7th 2004

- 1st Prize: J.C. Guillon W6JVG/ Yaesu FT-2800M 65W Mobile rig
 2nd Prize: Fish Fishman K6FSH/ Garmin eTrex GPS Receiver
 3rd Prize: Terry Finn AF6TF/ Two Motorola FRS Radios
 4th Prize: Bob Shelton K6TGR/ 12V Air Compressor
 4th Prize: Andy Gonzales KG6RWO/ Repeater Directory
 Bonus Prize: Don Trask KF6 JMQ/ 1 Year Subscription to WORLD RADIO



PAARA Members and Visitors: **THANK YOU FOR YOUR SUPPORT** of the upcoming *PAARA 2004 Dream to Reality Raffle II* as well as the exciting monthly raffles! Since Feb. 03, **38 Radios**, including an ICOM 706 MK IIG have gone to Fellow Hams, **THANKS TO YOU!**

PAARA is having a remarkable year in 2004, and if you aren't a member, please join PAARA and experience fun events with the friendliest club around.

~K6AK Jim

PAARA "The Friendliest Club Around"

Palo Alto Amateur Radio Association, Inc.

Date and Time: Friday, June 4th at 7:30 p.m.

Location: Menlo Park Recreation Center, 700 Alma St., Menlo Park, CA.

PAARA Website: www.paara.org

Welcome Members and Visitors

SPECTACULAR, UNBELIEVEABLE, & HEART-POUNDING EXCITEMENT!!

"MUST ATTEND EVENT OF THE YEAR" say Amateur Radio Operators Worldwide...

Mark your calendar and don't sit down in that Barcalounger because "that's not all folks!"

FIRST PRIZE:

Come try your hand at winning the

Elecraft KX1 Transceiver with Plug-in Keyer Paddle

Ultra-Portable, 3-Band HF QRP Transceiver, 35 mA Receive, Weight 9 oz.

Note: May exchange for other Elecraft Product. Special Thanks to Wayne and Elecraft for their help!

SECOND PRIZE: Garmin eTrex, 12 Channel, GPS Receiver

THIRD PRIZE: 3Com Wireless 11g Cable/DSL Gateway AND Wireless 11b Client PC Card OR TWO FRS Radios

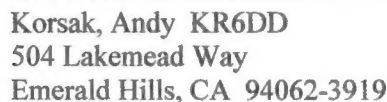
Don't forget about the TWO / FOURTH Place Raffle Prizes plus a Bonus Prize of a 1-year subscription to WORLD RADIO.

Enjoy our fabulous speakers, free refreshments, chatting with your friends, and the chance to take home an unbelievable prize. See you at Round Table after the meeting! Kyle, Ian and I are having a lot of fun. **THANKS AGAIN FOR MAKING THE MEETINGS VERY EXCITING!**

The PAARA Raffle is FULL of SURPRISES and YOUR LUCKY DAY may be June 4th

Contact Kyle, KG6MSK and Ian, K6IAN, "Two of PAARA's youngest members" for tickets at the meeting.

FIRST CLASS MAIL



See Site Directions page 64

Sunnyvale, 510 Lawrence Exp. #102 (408) 854-6046